## Redescription of Aedes (Ochlerotatus) camposanus Dyar (1918) as a Valid Species Found in the Coastal Plain of Ecuador

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DURING THE RAINY SEASON of 1950–51 the author collected a great deal of mosquito material near Guayaquil. Among the specimens taken from light traps were the male specimens of a species apparently unknown in the fauna of Ecuador. The specimens were sent to the United States National Museum in Washington and were determined as *Aedes* (*Ochlerotatus*) *eupoclamus* Dyar and Knab, 1906.

The author became doubtful of this identification as the male terminalia would not comply with the known descriptions of A. eupoclamus and asked for a slide specimen of this species from its type locality, Costa Rica. By courtesy of Dr. Alan Stone, a slide was obtained from the collection of the U.S. National Museum, and it was possible to make a comparison, which showed that, although the Ecuadorian specimens could be easily confused with A. eupoclamus, the claspettes, tenth sternites, and mesosomae were different. The Ecuadorian specimens proved to be a species described by H. G. Dyar (1918: 128) from specimens collected in Guayaquil. The types, male and female, are listed under No. 21916 in the U.S. National Museum collection, with the original name of Aedes (Ochlerotatus) camposanus Dyar. This species is very similar to A. (O.) scapularis Rondani and to A. (O.) eupoclamus Dyar and Knab, but it does not show a small retrorse filament in the claspette.

This species was named in honor of Pro-

fessor Francisco Campos Rivadeneira, of Guayaquil, Ecuador, who submitted the specimens to Dyar in 1918.

## Aedes (Ochlerotatus) camposanus Dyar, 1918

FEMALE: Proboscis dark with white spots. Palpi small, dark, with small silvery white spots. Occiput with dark integument and white erect scales; borders of eyes with same erect white scales and a few dark setae. Vertex with silvery white scales and a few dark setae, which form a tuft overhanging the clypeus. Neck with silvery white elongate scales. Prothoracic lobes showing tufts of silvery white scales and setae, with the integument olive-colored with freckle-like silver spots. Mesonotum showing a wide gray band in the middle, extending from pronotum to prescutellum, divided in the middle by a dark line and limited laterally by 2 black lines ending at the prescutellum with a tuft of white scales. Pronotum with tufts of white and light brown scales on each side and to center. Disc revetted with light brown and white scales and silvery setae. Prescutellum showing a large gray spot which becomes larger toward the scutellum, formed by white scales and silvery setae. Scutellum showing 3 lobes, the 2 lateral ones light brown with dark setae, the middle one with silvery white scales and setae; 2 dark spots in intersection of lobes. Pleurae and coxae revetted with small tufts of silvery white scales and setae with light brown integument with freckle-like silver spots. Coxae showing small silvery white tufts in

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FIG. 1. Hypopygium of Aedes (Ochlerotatus) camposanus Dyar, 1918.

union with legs. Wings dark colored with dark scales. Femora of fore legs white with dark line in ventral surface. Tibiae dark with many white spots. First tarsi dark with white rings and spots. Second, third, and fourth fore tarsi dark with white spots; fifth fore tarsi dark, with white tip. Femora and tibiae of midlegs white with black spots; first tarsi dark with white spots; second and third tarsi with intermixed black and white scales; fourth and fifth tarsi dark scaled. Femora and tibiae of hind legs covered with white scales speckled by black scales. First tarsi white with black rings and spots; second tarsi black with freckle-like white spots, and 2 larger white spots, one basal, the other apical; third tarsi black with freckle-like white spots, with large terminal white spot; fourth tarsi black; fifth tarsi black with apical white spot. Last 6 abdominal segments show dorsally, in portion nearer thorax, revetment of silvery white scales, especially in basal and lateral portion of segments, forming characteristic silvery white banding that limits the segments and

covers them laterally and ventrally. Venter totally covered with silvery white scales, lateral portions bordered by silvery white setae that seem hair-like, a characteristic of this species which does not show in A. (O.) *eupoclamus* Dyar and Knab.

MALE: Same color as female. Long palpi black with spots of silvery white scales and black setae. Terminalia: Coxite long, tapering, conical, longer than wide, with long hair-like setae and a few long oval scales in outer surface. Apical lobe round, small, with small setae. Basal lobe with strong setae, one of them prominent, sclerotized, with round sharp tip. Clasper strongly sclerotized basally, thickened toward the mid-portion then thinner subapically, curving apically, with sclerotized round base for a tapering, long, sclerotized apical filament. Claspette with sclerotized stem which becomes suddenly thinner in the middle, then thickened again toward the apex, where there is a sclerotization with a sickle-like filament becoming wider in the middle. The stem having many micropilae

and very minute setae. Mesosome a sclerotized, truncated cone, tip slightly rounded, subbasally with some long filamentous setae, which are characteristic for this species. Tenth sternites elongate and partially sclerotized, showing a beak-like process in distal margin, very strongly sclerotized; some minute filaments arising from prominences on inner portion. Ninth tergites sclerotized, forming 2 lobes with 5 long sclerotized filaments at the tip and 1 in the middle.

TYPE LOCALITY: Guayaquil, Ecuador, as given by Dyar in his original description, this being the same locality where specimens which I have studied were collected. The species has been confused by many authors under the name *A. eupoclamus* Dyar and Knab, but has many characters that are unlike those of this Costa Rican and Central American species. I believe, therefore, that it should be placed as a valid species, not as a synonym of eupoclamus. In my opinion, A. (O.) eupoclamus has never existed in Ecuador or any other country of the Pacific coast of South America.

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